

**REL Mid-Atlantic Teacher Effectiveness Webinar Series**  
**Professional Development: What Works?**  
**Q&A with Dr. Hilda Borko**  
**May 23, 2013**

*In this webinar, Dr. Hilda Borko, professor, Stanford University Graduate School of Education, presented examples of promising models of professional development, including the Problem-Solving Cycle, Learning and Teaching Geometry, and the use of videos as tools for teacher learning. This Q&A addressed the questions participants had for Dr. Borko following the webinar. The [webinar recording](#) and [PowerPoint presentation](#) are also available.*

**Effective types of Professional Development (PD)**

**1. What are the most effective models for PD—PLCs [professional learning communities], school- wide, individualized—a balance or mix?**

Research suggests that it is important for PD to be collaborative, so individualized models can be problematic. It is also important for PD to be subject-matter specific, so schoolwide models can also be problematic.

**2. What does the most effective type of PD in math look like?**

In addition to the Problem Solving Cycle model, two types of PD that have research to support their effectiveness are video clips and cognitively guided instruction. All of these approaches share the characteristics of being ongoing and connecting the classroom to PD, usually through some sort of artifact (video or student work). Video is such a powerful approach; if resources are limited, one approach is to start by videotaping a handful of teachers or using videos of students if teachers are not yet comfortable with being videotaped themselves.

**3. How can we design active training for large groups?**

A few successful methods are: (1) ask for participants to pose their questions and pause at certain points in the lecture/session; (2) structure the session by breaking participants into small groups and having people talk to one another in that format, with the presenter then rotating through all of the small groups to respond to questions, push participant thinking, and then bring everyone back to share big ideas as a large group; and (3) ask participants to lead segments of the larger group to build capacity.

**Application to Practice**

**4. How do you cultivate the habit of continually learning new strategies, trying them out, assessing if they work, revising, trying again, and so on through the cycle of learning?**

All of the PD models I described are designed to cultivate continual learning; they are ongoing, iterative, and build on themselves. Another piece is setting aside time for PD. Ongoing learning happens if it is built into the culture and supported by the district. It is also important to have flexibility for PD leaders and participants to be involved in selecting a topic/instructional strategy that is meaningful to participants, either at the school or

district level. If the video model is being used, it is then important for PD leaders to choose video clips that address the priority that is selected and/or highlight processes/problems that line up most closely with the area of concern.

**5. How essential is coaching (peer or otherwise) to effective practice?**

It is a decision of resource allocation. In our work, we chose to not use the coaching model; instead we chose to use the limited time of the PD leader to design and actually lead the workshops. It is just a different model.

**6. How do you take the big ideas in professional learning and get them into classroom/teachers' practice?**

You must have a close connection between PD and the classroom. Bring PD into the classroom and the classroom into PD so application and reflection can occur. The professional learning that takes place should be situated in practice and be meaningful within the context of teaching and learning that take place in the classroom.

### Testing

**7. What specific professional development will help teachers prepare students for the PARCC [Partnership for Assessment of Readiness for College and Careers] and SBAC [Smarter Balanced Assessment Consortium] testing?**

One interesting thing about the Common Core State Standards (CCSS) is that the math practices are written so broadly that a number of people around the country are now trying to operationalize them and understand how they would actually look in practice. As one example, it is important how you select a video and how you encourage teachers to look at, notice, and discuss specific aspects of instruction. Leaders can consider tasks within the Problem Solving Cycle that will foster students' cognitive demand in mathematics and engage students in the mathematical practices. All the problems we selected are the kinds of problems you can see engaging students in the mathematical practices. A number of websites have mathematically rich tasks that could be brought into the Problem Solving Cycle. Leaders can also make choices based on the particular content strand you want to emphasize in your work.

### Sustainability

**8. In my experience, professional development can be unsustainable. How can schools promote ongoing, iterative professional development that is both reflective and reflexive in nature?**

Schools can promote PD by supporting it. That is, PD must be valued and supported at the district level for it to be sustained. Questions to consider: Are there structures during the day to support PD? Is it part of the teacher's work day and work week? How is it built into the culture of the week?

**9. How are schools making time in the school day for professional learning?**

Almost all schools have some time set aside for PD, and it is really how they choose to use that time. Some time may have been cut due to budget cuts, but with the CCSS, some of this time may come back. The key is to capitalize on what resources are available.

## PD Evaluation

### 10. Can you identify a framework for evaluating the quality of professional development events?

#### What are some recommended resources to support evaluation of impact?

As part of our research, we decided early on not to be in the business of creating assessment tools but to use existing tools—mathematical knowledge for teaching and mathematical quality of instruction (paper/pencil and online) that will study both: (1) survey of knowledge and (2) approach to assessing/evaluating observations of classrooms. Heather Hill (Harvard) and Deborah Ball (Michigan) have been engaged in this work (links to their work are given below). We started with the PD observation protocol from Horizon research, but have used only parts of it (workshop culture, teacher knowledge—pedagogical/content knowledge). Some valuable resources come from the Measures of Effective Teaching study and from Charlotte Danielson’s Framework for Teaching (both resources are listed below).

### 11. What is the role of teacher portfolios and other types of PD evaluation for teachers?

It depends on what you include in a teacher’s portfolio. One thing that is often included is video of instructional practice. In the National Board Certification portfolio, teachers include video and reflect on it. Teachers could reflect on it with the same types of questions they might use in PD or do the same thing with samples of student work.

## Action Steps

**Participants responded to the question “As a result of today’s webinar, what action steps do you plan to take?” and some of their responses are listed below.**

### *Teachers*

- Advocate for the implementation of videos as a method for feedback and discussion in PD at my school.
- Speak to the Superintendent to create some kind of a program so teachers can assist in leading some PD sessions.
- Explore more of Dr. Borko’s exciting research and the other research she mentioned.

### *Instructional Leaders/PD Leaders*

- Bring the Problem Solving Cycle model to our PD team to discuss ways we may be able to implement it.
- I have some better ideas about the planning process and also ways to build the capacity of the teachers involved so the work does not end with our sessions.
- Creating teacher leaders to begin developing capacity at our school/district.
- Solicit volunteers to allow themselves to be videotaped.
- Starting with teaching videos of others and then moving toward the confidence to use

one's own video of teaching as the “stuff” of discussion/analysis.

- Focus my video recordings of classes based on the teachers' needs and the goals for the video review.
- Really working to make sure the video doesn't end the sessions...they need to be built on.
- Many of our new Career and Technology Education teachers want to see “what teaching looks like” and I think videotaping then using this approach in developing guiding questions for discussion is a great way to do this.
- Utilize the tools to measure the effectiveness of my own work as a PD leader.

### ***Institutes of Higher Education***

- Think about how the Problem Solving Cycle could be used to engage School of Education faculty in focusing on pre-service teachers' understanding of teaching/teaching practices.
- Work to develop IHE [Institutes of Higher Education] and school partnerships to promote pre- service teacher understanding of teaching.
- Inviting cooperating teachers to PD sessions with teaching interns so that they can collaborate together on tasks that will help them learn together in the classroom.

### **Additional Resources**

Resources suggested by Dr. Borko:

- Horizon research—instruments for PD evaluation  
<http://www.horizon-research.com/instruments/>
- Charlotte Danielson's Framework for Teaching  
<http://www.danielsongroup.org/Default.aspx>
- Measures of Effective Teaching study  
<http://www.metproject.org/>
- Heather C. Hill, Professor of Education at Harvard's Graduate School of Education  
<http://www.gse.harvard.edu/directory/faculty/faculty-detail/?fc=79317&flt=h&sub=all>
- Deborah L. Ball, Dean, School of Education at University of Michigan  
<http://www-personal.umich.edu/~dball/>

Resources suggested by participants:

- [www.learner.org](http://www.learner.org)
- [www.insidewritingworkshop.org](http://www.insidewritingworkshop.org)
- Apple app YourTeacher